Australian Information
Industry Association

AIIA SURVEY
DIGITAL STATE OF THE NATION 2024

JULY 2024

DIGITAL STATE OF THE NATION 2024: AIIA MEMBER SURVEY

Overview

The AIIA's strength lies in its diverse membership, spanning start-ups to multinational corporations. Our members represent the full range of the tech sector, including telecommunications, cloud, data centres, systems integrators, cyber security, hardware, software, and professional services businesses.

For the fifth year, the AIIA has surveyed its members to understand industry issues, aiding policy development and communication with government. We are proud of our 400+ active individual members in State & Territory Councils, Policy Advisory Networks, and Working Groups, leveraging their expertise to strengthen the industry.

Our national Policy Advisory Networks (PANs) include:

- Workforce Strategy
- Cyber Security
- Federal Government
- Domestic Capabilities
- Environment, Sustainability and Governance
- Health
- Legal

Through our State and Territory Councils, there are additional sub-PANs that focus on issues in their respective jurisdictions.
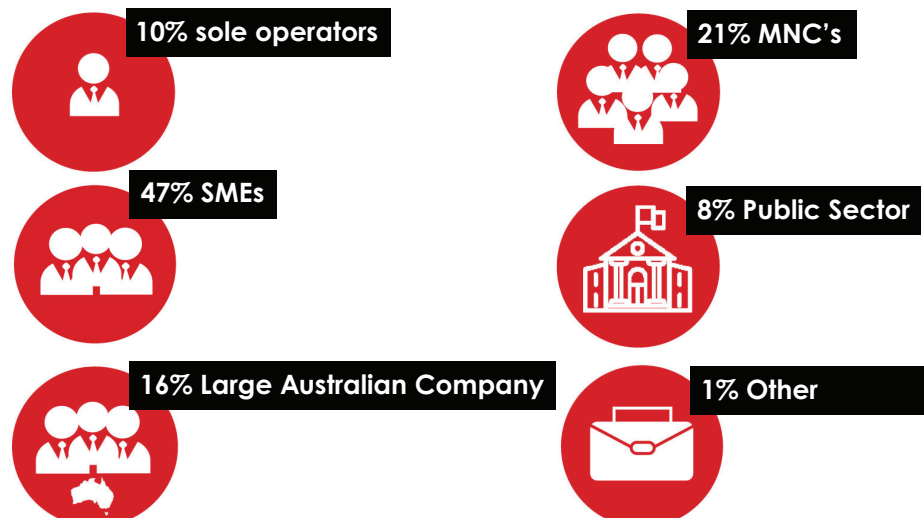
Report Methodology

The 2024 survey included questions from the previous years, enabling the AIIA to monitor changes in responses over time to gain a comprehensive understanding of trends in:

- Digital economy competitiveness and growth expectations
- Government leadership and policies
- Workforce strategy and skills availability
- Technology procurement and adoption
- Industry approach to net-zero carbon goals

Respondent segmentation

Most respondents were from professional services companies (50%), software companies (16%) and education and skills businesses (14%) with an even split among the other categories of cloud and web hosting, data centres, Artificial Intelligence (AI)/Machine Learning/Robotics.

In market May-June 2024

- 10% sole operators
- 21% MNC's
- 47% SMEs
- 8% Public Sector
- 16% Large Australian Company
- 1% Other

SUMMARY AND KEY FINDINGS

99% felt **VET and Higher Education graduates are not job ready** and 65% of respondents have stepped up to reskill local workers.

72% of respondents stated they do not think Australian governments understand the importance of ICT to the Australian economy which was a significant increase.

Highest levels (54%) of concern regarding the future of the Australian economy in the last three years.

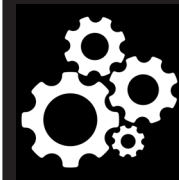Five-fold increase in **flat or no job market growth expectation** from 7% to 38% with 53% of respondents citing **government spending retractions** as the main barrier to business expansion.

Government is not being an exemplar in tech policies and enabling innovation. 63% of respondents believe the Government needs to upskill its employees with mature industry skills to adequately understand and champion ICT related economic opportunities. Industry wants it to focus on safe and fast AI adoption (49%), data and privacy (39%) and lessening regulatory burden (35%).

Increase in ICT investments in government, financial services and professional, scientific and technical services is primarily to drive operational efficiency (81%) and improve business processes (47%) instead of innovation.
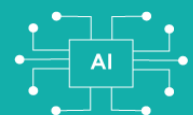
Government is also not leading on driving sustainability policies with 73% of respondents believing governments should better measure carbon impacts of their own procurements.

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Rising use of AI within businesses, particularly for non-critical functions and experimenting with new AI features in existing software.

INTRODUCTION

In 2024, there has been a shift in business sentiment from AIIA members from previous annual surveys. There 2024 Survey shows a noticeable decline in revenue growth expectations within the ICT sector, with many companies now anticipating flat growth rather than the robust expansion previously forecast. This softening growth is primarily attributed to increased market uncertainty and a perceived lack of government leadership in harnessing the current technology boom to stimulate economic advancement and reduction or delays in government expenditure.

Parallel to this economic deceleration, the job market is experiencing a slowdown. Notably, there will be a shift in the demand for skills, with a growing emphasis on app development and coding capabilities. In response to this evolving landscape, the industry has taken proactive steps to reskill workers, addressing the shortage of these critical skills within Australia. However, the continued skills unavailability, lack of job readiness in graduates and rising labour costs have driven some companies to seek talent overseas, highlighting the financial pressures faced by domestic businesses.

The cautious approach to hiring is mirrored in investment behaviours, particularly in technology. While there is an anticipated increase in ICT investments within government, financial services, and professional, scientific, and technical services sectors, these investments are largely aimed at enhancing operational efficiency and improving business processes. This trend is further supported by the rising adoption of artificial intelligence (AI) across non-critical business functions, with companies leveraging new AI features in existing software solutions.

The survey highlights an uncertain regulatory landscape that fails to meet the needs of a rapidly evolving digital economy. ICT businesses are eager for the government to focus on IT policies that addresses skills deficit and cyber security lapses and promotes a digitised society and economy. Notwithstanding, the survey shows that the regulatory uncertainty and future slated regulation from government including AI, cyber and privacy is creating uncertainty for our members and across the broader economy.

Interestingly, there has been a decline in the perceived importance of reducing carbon footprints among IT companies, especially small and medium-sized enterprises (SMEs). The survey also shows that IT companies believe the government has not set a robust example in carbon measurement and procurement practices.

In summary, the 2024 menber survey shows that business growth in the ICT sector is returning to more normalized levels with expected revenue growth and job growth to have moderated. Further, the survey shows that industry is seeking more leadership from government in terms of adoption, regulation and investment in technology to drive productivity across the economy.

RESULTS FROM KEY QUESTIONS

## DIGITAL ECONOMY COMPETITIVENESS AND GROWTH EXPECTATIONS
In terms of the future of the Australian economy are you:

The ICT sector in Australia has reached record levels of concern regarding the future of the national economy in the last three years, with 54% of survey respondents now expressing apprehension. This anxiety has been escalating steadily over the past three years, rising from just 28% in 2022. This significant increase highlights the growing unease within the technology community as they face economic and regulatory uncertainties including cyber security, privacy and AI that could impact the sector's stability and growth prospects.
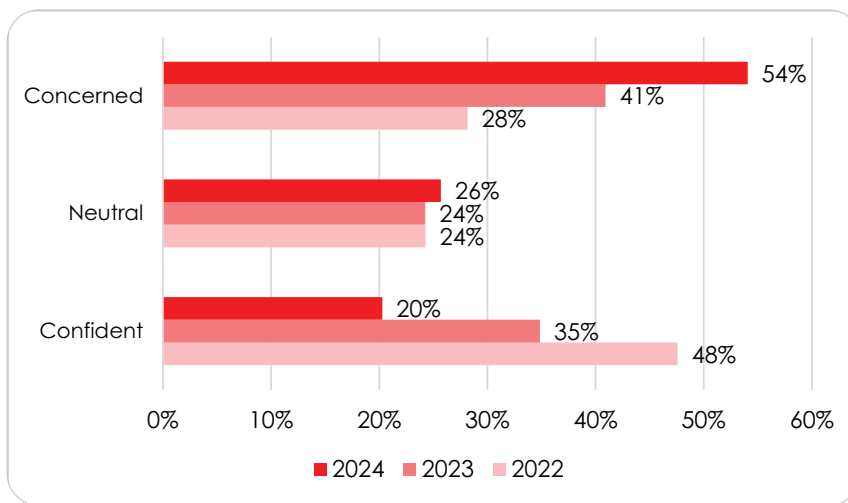
In terms of your own business, looking at 2024, do you see:

Technology businesses are experiencing a slowdown in expansion, reflecting a shift in job market growth expectations. Just a year ago, most of these companies (56%) anticipated Full Time Equivalent (FTE) growth of above 10%. However, current expectations have moderated significantly, with projections now ranging from flat to minimal FTE growth (38%). This change highlights a cooling in the optimism that previously characterised the tech sector's outlook on workforce expansion.
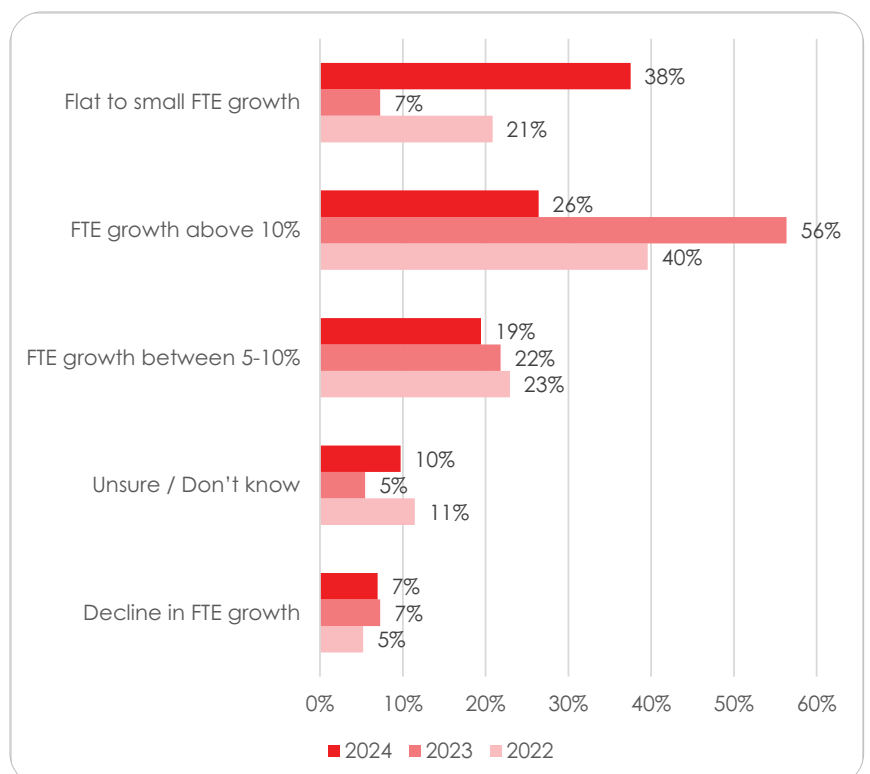
What do you see as the main barrier to expanding your business?

Government cutbacks in spending, highlighted by 53% of respondents, are the primary barrier to anticipated reductions in business growth. Additionally, companies are grappling with significant challenges in accessing necessary skills (21%) and financing (10%). These issues are notably prevalent across the AIIA's extensive membership, particularly affecting SMEs. These smaller enterprises are not only suffering but are also increasingly at risk of insolvency. This underscores the critical challenges facing the ICT sector and highlights the need for strategic interventions to support and sustain business viability.
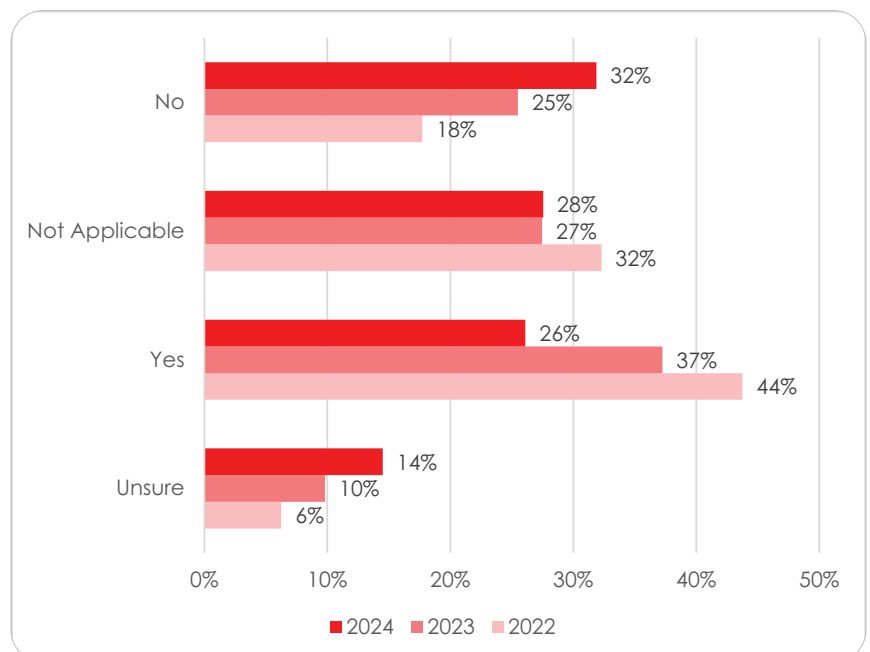
Government retraction in spend
- 2024: 53%
- 2023: NA
- 2022: 26%

Skills shortages
- 2024: 21%
- 2023: 45%
- 2022: 44%

Limited access to finance
- 2024: 10%
- 2023: 24%
- 2022: 7%

Limited demand for your product/service
- 2024: 6%
- 2023: 14%
- 2022: 6%

Absence of new markets
- 2024: 6%
- 2023: 8%
- 2022: 7%

Supply chain constraints
- 2024: 4%
- 2023: 6%
- 2022: 4%

Travel difficulty and international border closures / uncertainty
- 2024: 0%
- 2023: 2%
- 2022: 5%

(■ 2024 ■ 2023 ■ 2022)

If you are a domestic ICT company, are you actively looking to grow your business by expanding offshore or increasing exports?

ICT businesses in Australia are encountering multiple pressures, foreseeing flat growth locally whilst showing dwindling interest in expanding offshore or increasing digital exports for new revenue streams. From 2022 to 2024, the percentage of respondents not looking to expand overseas increased from 18% to 32%. This trend highlights an opportunity for the Australian government to proactively promote and adopt digital exports by harmonising digital standards for international trade, encouraging cross-border collaboration, and overcoming the lack of awareness and utilisation of Free Trade Agreements, thus giving businesses a competitive edge.

No
- 2024: 32%
- 2023: 25%
- 2022: 18%

Not Applicable
- 2024: 28%
- 2023: 27%
- 2022: 32%

Yes
- 2024: 26%
- 2023: 37%
- 2022: 44%

Unsure
- 2024: 14%
- 2023: 10%
- 2022: 6%

(■ 2024 ■ 2023 ■ 2022)

GOVERNMENT LEADERSHIP AND POLICIES

Do you think Federal and State Governments understand the importance of ICT to the Australian economy?
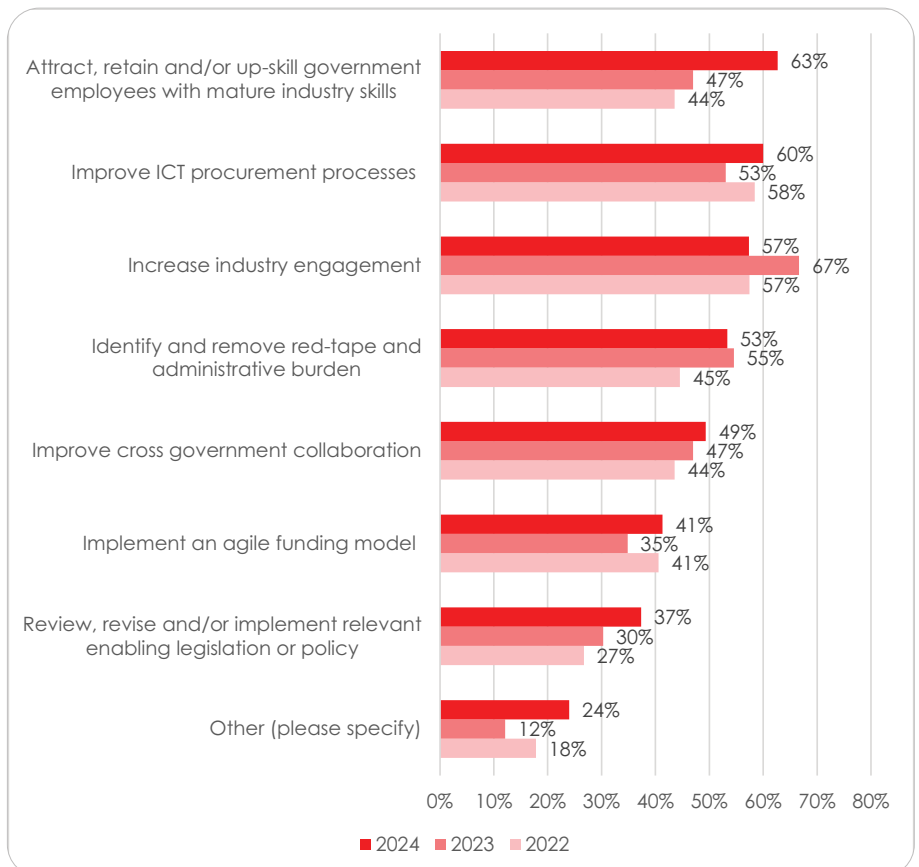
The ICT sector in Australia is expressing serious concerns over what it perceives as governmental neglect. For the past three years, the majority within the sector have felt that neither Federal nor State Governments grasp the importance of ICT to the Australian economy. This sentiment has reached a peak, with 72% of respondents now sharing this view. Recent Federal and State Budgets for 2024-2025 underscore this disconnect, highlighting a lack of leadership and vision for the sector, particularly in formulating a sustained strategic plan to leverage emerging technologies like AI and Quantum Computing.

Chart: Understanding importance of ICT

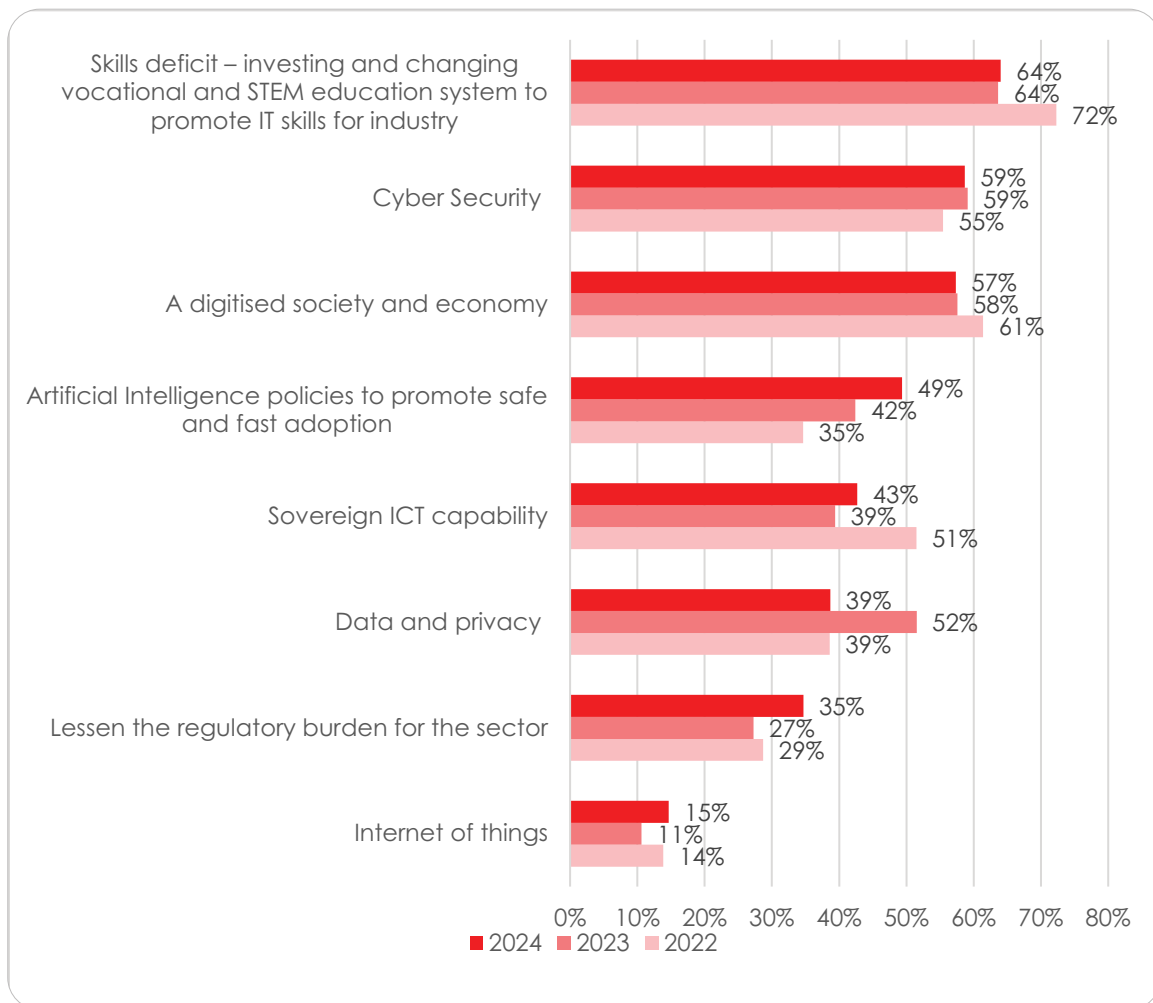|	2024	2023	2022
No	72%	55%	62%
Yes	28%	45%	38%
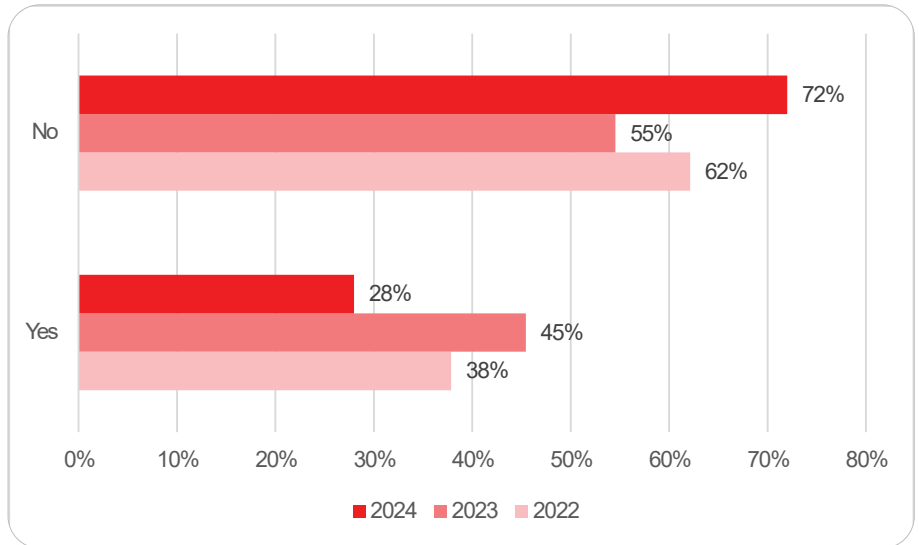
What do you think governments could do to improve their understanding of and approach to ICT related opportunities and challenges?

The ICT sector is urging the Australian Government to focus on attracting, retaining, and up-skilling its employees with strong industry skills to better navigate ICT opportunities and challenges. There is also a critical need to streamline ICT procurement and reduce administrative burdens to jumpstart technology business opportunities and accelerate growth. Notably, the sector places less emphasis on legislative changes, despite it being a primary focus of the Government, believing the existing laws are adequate to manage the misuse of ICT innovations.

Chart: What governments could do

	2024	2023	2022
Attract, retain and/or up-skill government employees with mature industry skills	63%	47%	44%
Improve ICT procurement processes	60%	53%	58%
Increase industry engagement	57%	67%	57%
Identify and remove red-tape and administrative burden	53%	55%	45%
Improve cross government collaboration	49%	47%	44%
Implement an agile funding model	41%	35%	41%
Review, revise and/or implement relevant enabling legislation or policy	37%	30%	27%
Other (please specify)	24%	12%	18%

With respect to IT policy, where do you think the government (State or Federal) should focus?

The ICT sector has been consistently calling for the Federal and State Governments to develop a strategic industry policy focused on enhancing Australia's digital economy over the last three years. There is a strong desire for a comprehensive plan that not only supplies the necessary technology skills and talents but also fosters a connected and digitised society and economy. Additionally, there is an overwhelming demand for bolstering the cyber security framework to protect against emerging threats. Such a policy would ensure Australia remains at the forefront of global technological advancements and secures its digital infrastructure.

| Category	2024	2023	2022
Skills deficit – investing and changing vocational and STEM education system to promote IT skills for industry	64%	64%	72%
Cyber Security	59%	59%	55%
A digitised society and economy	57%	58%	61%
Artificial Intelligence policies to promote safe and fast adoption	49%	42%	35%
Sovereign ICT capability	43%	39%	51%
Data and privacy	39%	52%	39%
Lessen the regulatory burden for the sector	35%	27%	29%
Internet of things	15%	11%	14%

WORKFORCE STRATEGY AND SKILLS AVAILABILITY
Are you looking to hire and grow FTEs in 2024/25?

Despite projections of flat or modest business growth and the adoption of emerging technologies like AI, 62% of respondents remain actively engaged in or are planning to hire and expand their Full Time Equivalent (FTE) workforce. This indicates a commitment to investing in talent as a fundamental strategy for navigating future challenges and harnessing potential opportunities in the evolving technological landscape.
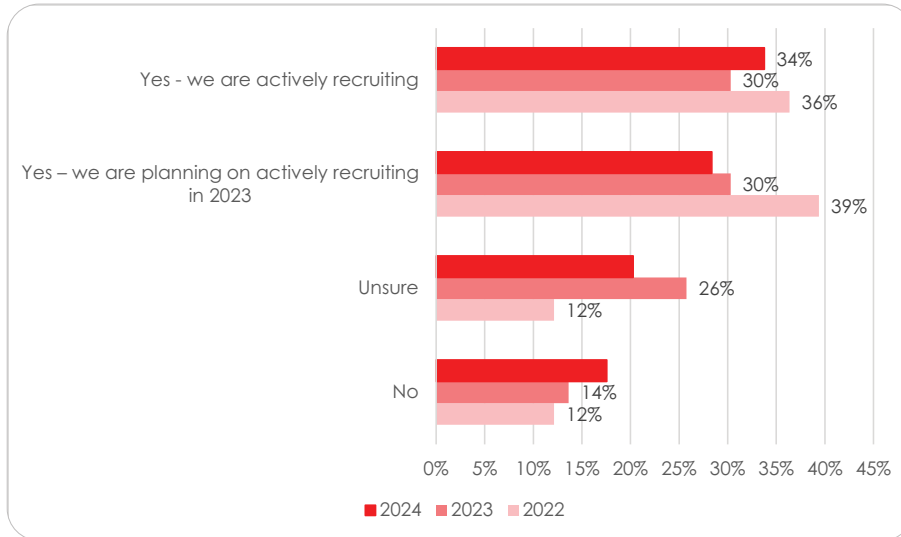
In terms of specific skills of the future, which skills will you look to be hiring in 2024?

AI and cyber security remain the top two skills in demand, while business analysis has ascended to become the third. This rise coincides with businesses' increased focus on enhancing operational efficiency and refining processes. The growing emphasis on business analysis underscores the sector's commitment to leveraging analytical insights for strategic decision-making, optimising operations, and ensuring robust security measures in an ever-evolving technological landscape.
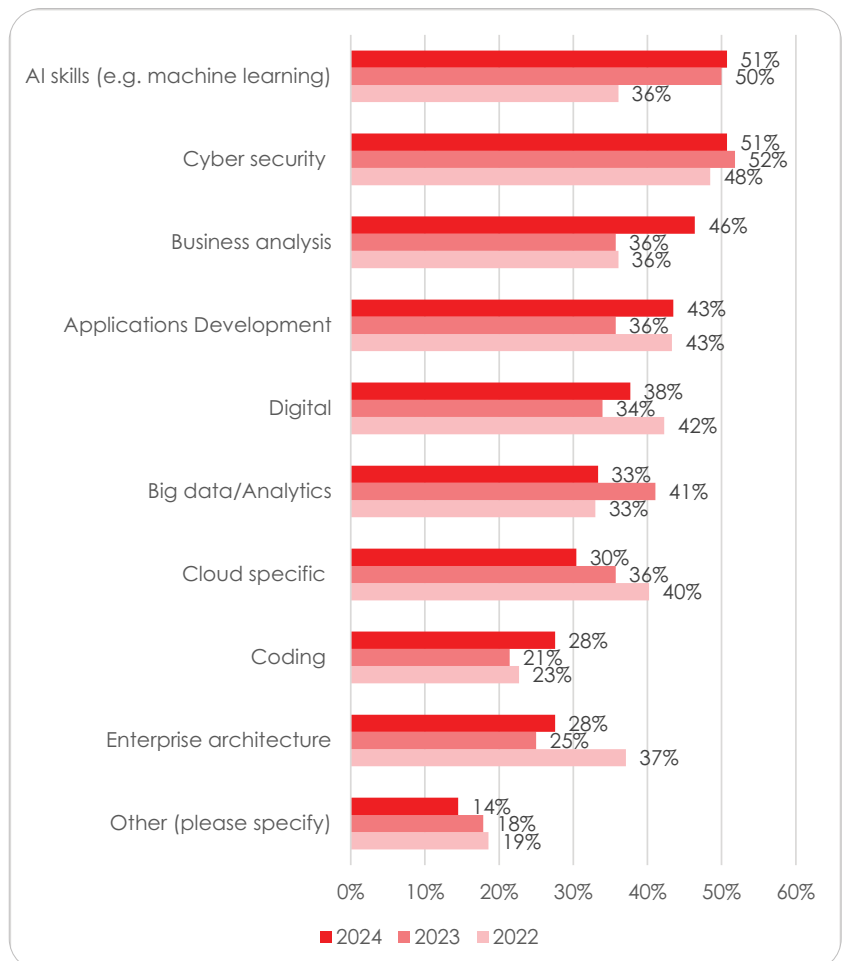
What were the skills unavailable in Australia?

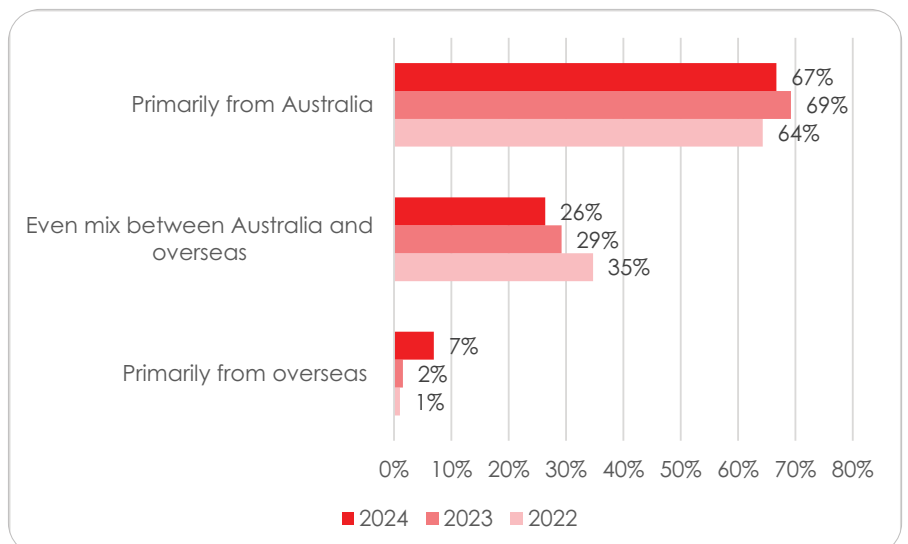Foundational technology skills such as app development and coding are now in short supply in Australia. In contrast, AI and cybersecurity skills have become more available as the industry has invested significantly in developing these capabilities. As a result, AI and cybersecurity, once the most sought-after skills, have fallen to the fourth and eighth places in demand. This shift underscores the changing dynamics of the tech industry and the pressing need for foundational tech expertise.

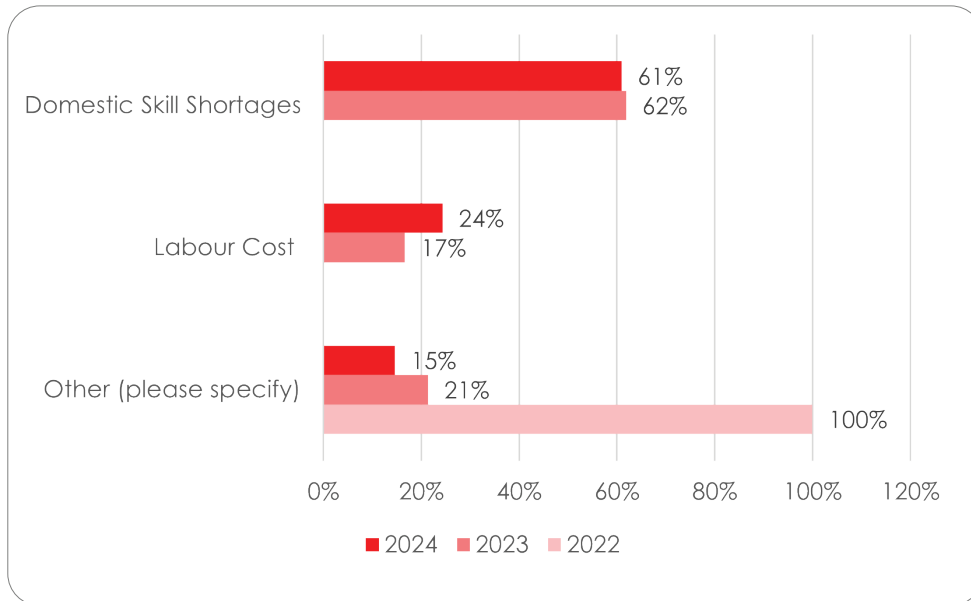| Skill	2024	2023	2022
Applications Development	49%	38%	42%
Coding	39%	23%	40%
Other (please specify)	33%	21%	15%
AI skills (e.g. machine learning)	31%	56%	21%
Enterprise architecture	29%	23%	25%
Big data/Analytics	24%	31%	29%
Digital	20%	29%	19%
Cyber security	20%	40%	33%
Cloud specific	16%	19%	23%
Business analysis	14%	10%	19%
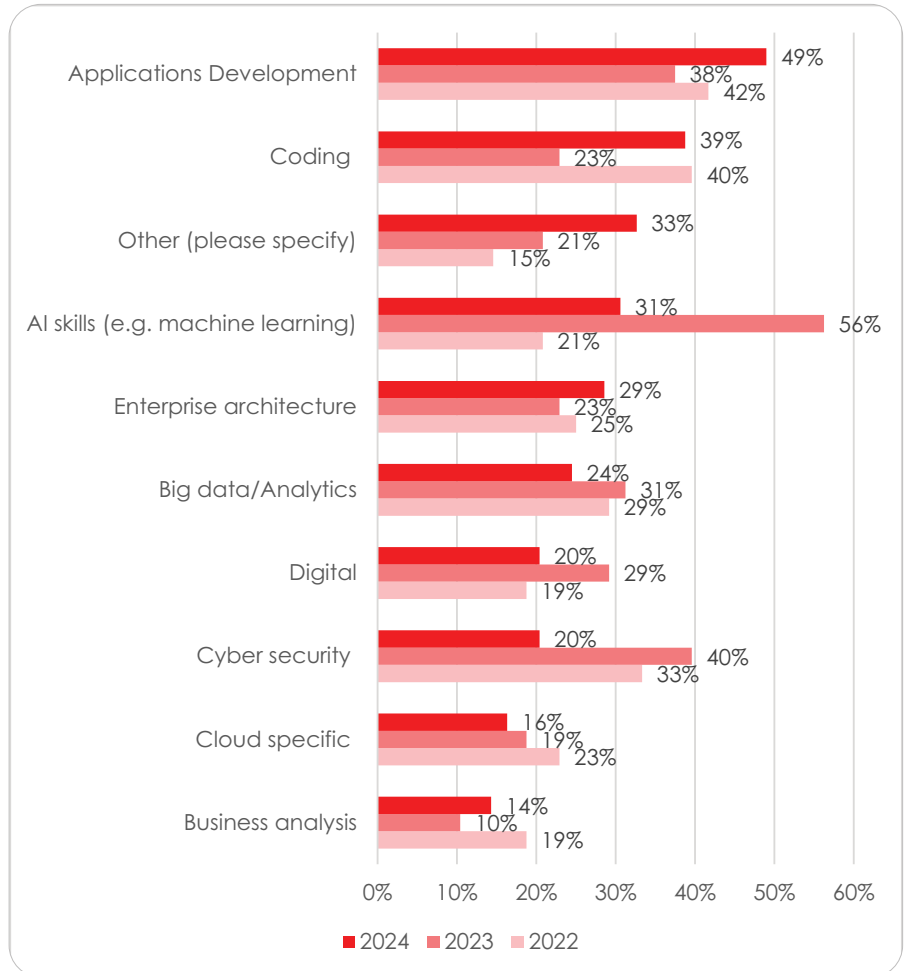
Do you expect to be hiring staff from Australia or from overseas?

The ICT sector in Australia remains committed to hiring primarily domestically, yet there's a notable shift towards recruiting from overseas, with interest growing from 1% to 7%. This change is driven by domestic skills shortages and escalating labour costs. The sector's increasing openness to international talent highlights a strategic response to ensure a steady supply of skilled professionals capable of supporting technological advancements and business growth in the face of local talent constraints.

	2024	2023	2022
Primarily from Australia	67%	69%	64%
Even mix between Australia and overseas	26%	29%	35%
Primarily from overseas	7%	2%	1%

If you expect to be hiring staff from overseas, what is the main reason?

In relation to our VET and Higher Education system, do you feel that they are producing job-ready candidates for the ICT sector?

99% of the respondents to the survey said that that VET and Higher Education graduates are not job-ready, requiring further training to be effective which has increased in 2024. 50% of respondents noted significant investment is needed, with 65% stepping up to train these workers. This highlights a persistent disconnect between the outputs of the education sector and the needs of the ICT industry, leading to additional expenditure of time and resources, and a resultant dip in productivity.
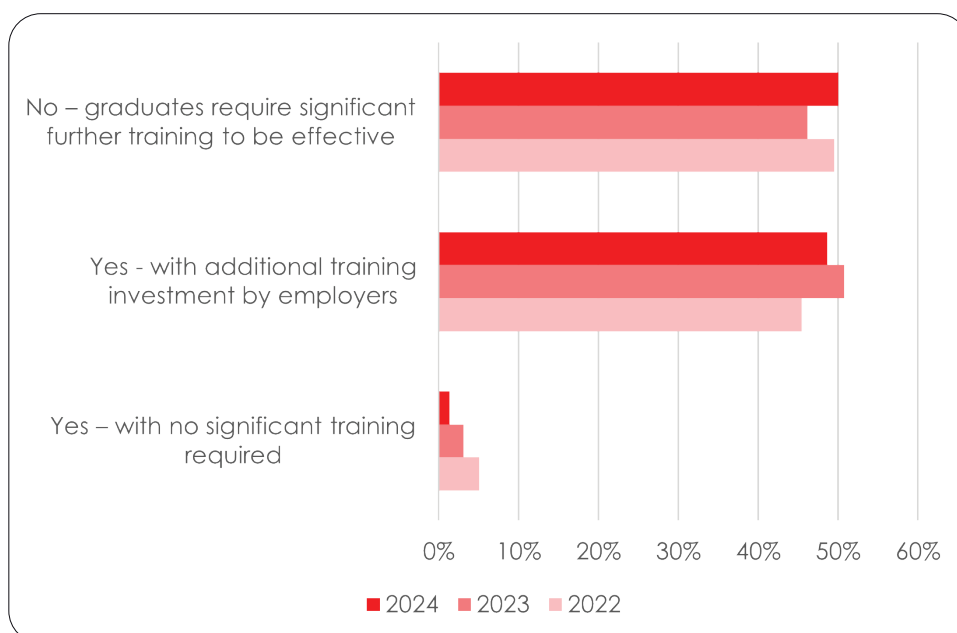
Do you believe your business has a role in re-skilling workers for jobs of the future?

Yes - we are already doing this
- 2024: 65%
- 2023: 68%
- 2022: 63%

Yes - we see the need to invest in this in the future
- 2024: 21%
- 2023: 19%
- 2022: 21%

No - we don't have capability and will leave to the market to re-skill workers
- 2024: 14%
- 2023: 14%
- 2022: 15%

■ 2024 ■ 2023 ■ 2022
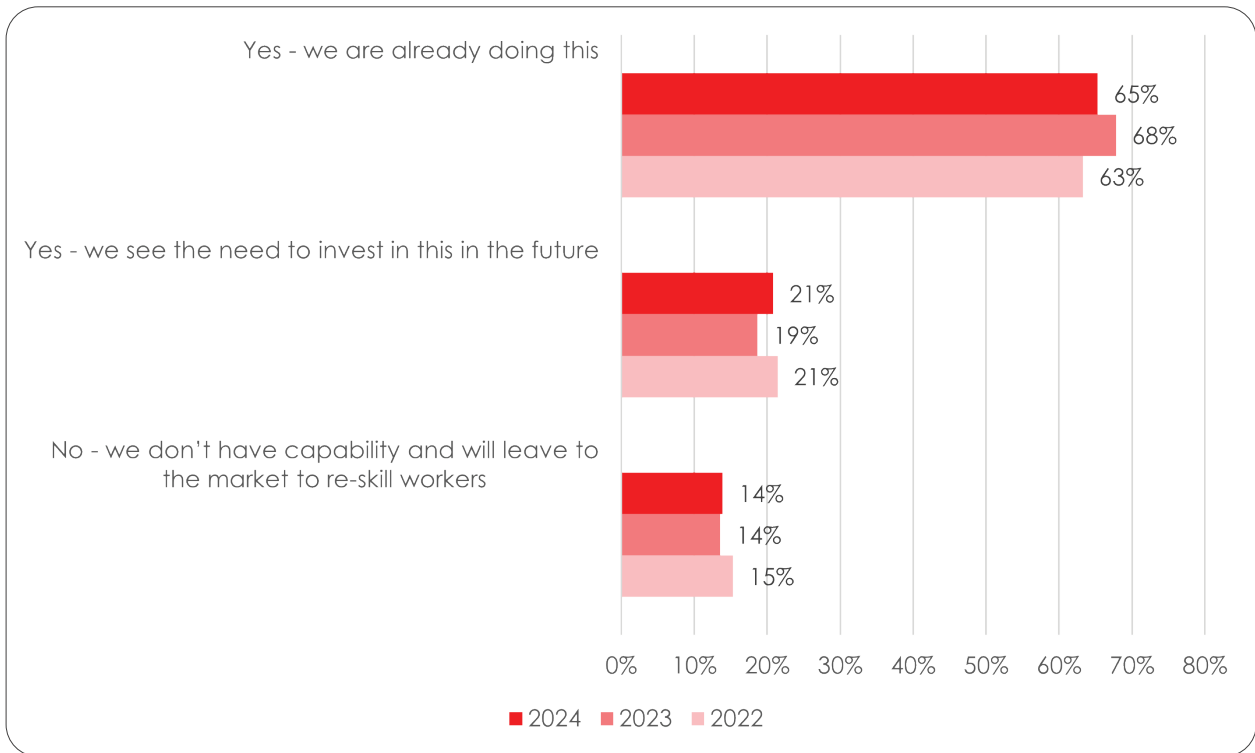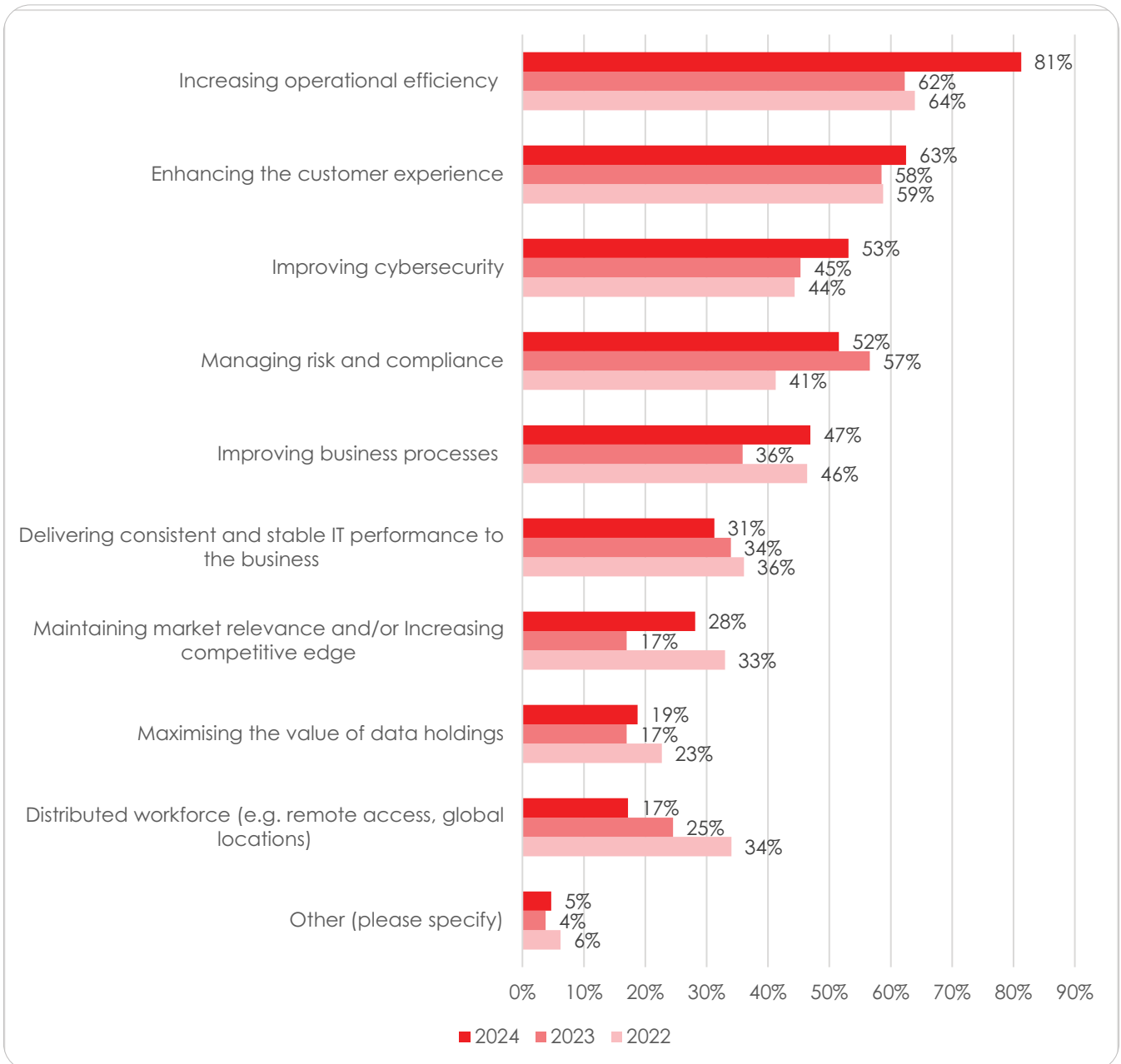
TECHNOLOGY PROCUREMENT AND ADOPTION

Which industry sectors do you expect will have the greatest adoption and growth (buyers) of ICT in 2024?

The Government, Health, and Financial services sectors continue to be the top three adopters and purchasers of ICT products and services. However, their procurement activities have seen a steady decline from 2022 to 2024. This reduction aligns with the earlier noted governmental retraction in spending. Indeed, only 66% of respondents in 2024 expect the Government to maintain its buying levels, a noticeable drop from 79% in 2022. This trend underscores a cautious Government approach to ICT spending amidst broader fiscal constraints and shifting budget priorities.

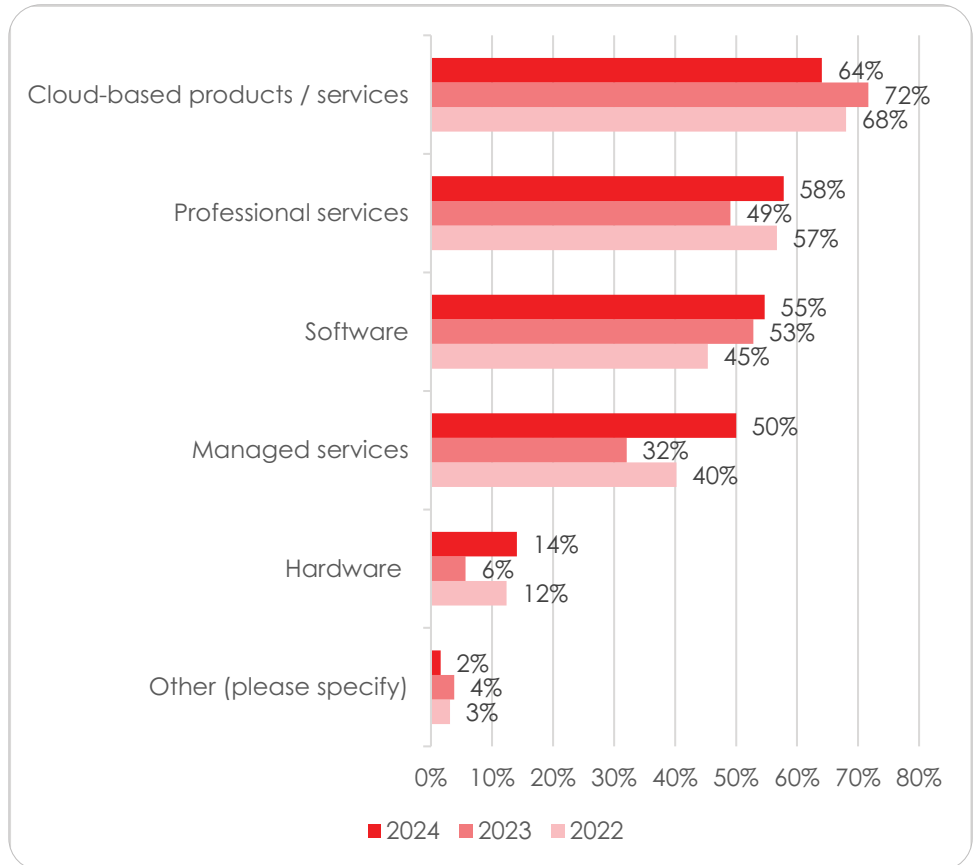| Sector	2024	2023	2022
Government and infrastructure	66%	72%	79%
Health	59%	58%	65%
Financial services	48%	55%	56%
Energy, mining and utilities	42%	49%	36%
Professional, scientific and technical services	36%	19%	27%
Agriculture	17%	15%	18%
Media and telecoms	16%	30%	21%
Fast-moving consumer goods, manufacturing and retail	16%	19%	24%
Retail	11%	13%	12%
Sport	8%	2%	2%
Other (please specify)	3%	8%	9%
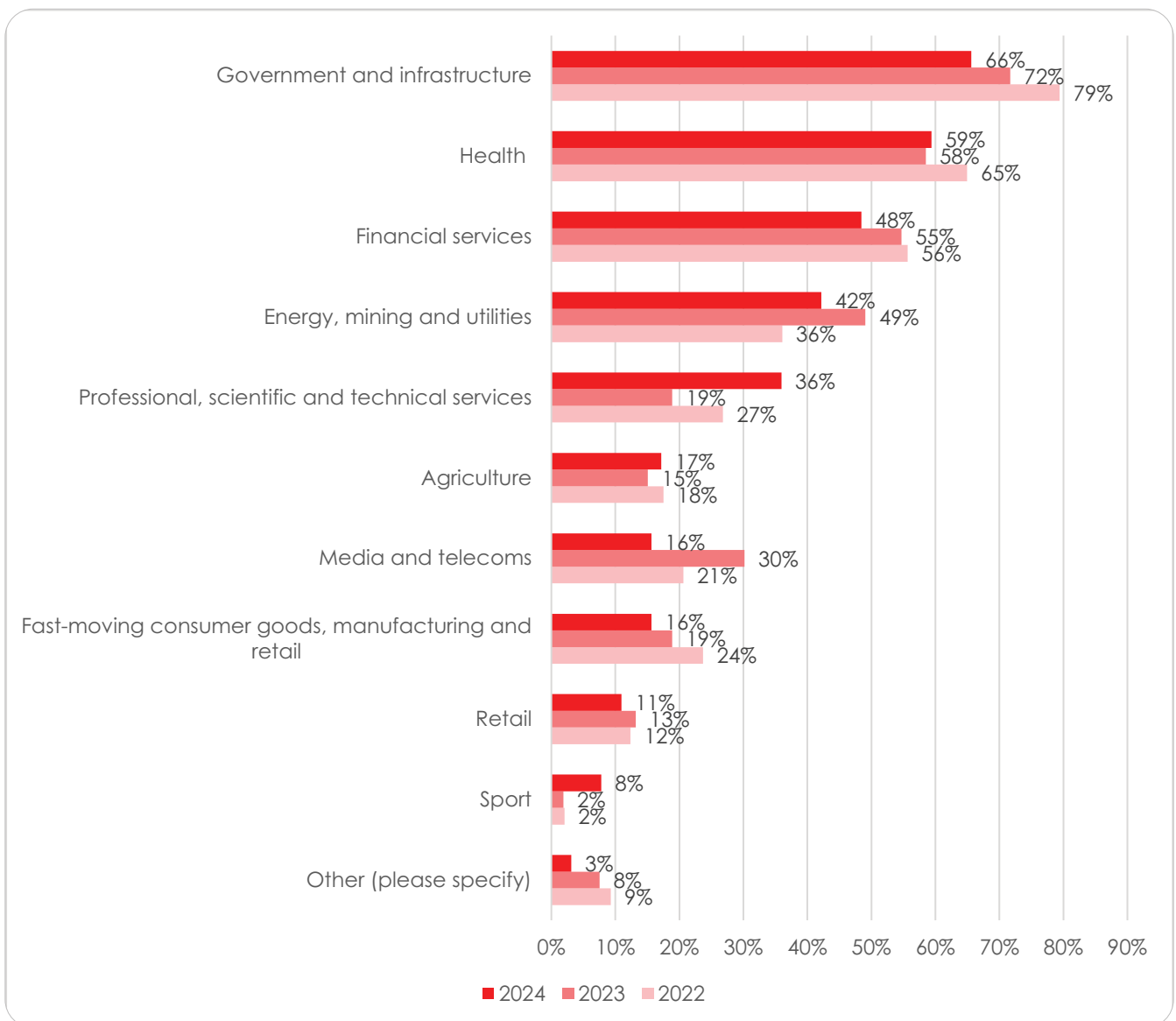
What factors do you see driving this adoption in those selected industry sectors?

The selected industry sectors are increasingly adopting or purchasing ICT to primarily enhance operational efficiency, with a notable rise from 64% to 81% of respondents indicating this from 2022 to 2024. Additionally, these sectors are focusing on improving cybersecurity and managing risks and compliance as secondary objectives. This shift highlights a strategic prioritisation of streamlining operations alongside bolstering security measures, reflecting a proactive approach to addressing both productivity and protective needs.

Chart: Factors driving ICT adoption by year (2024, 2023, 2022)

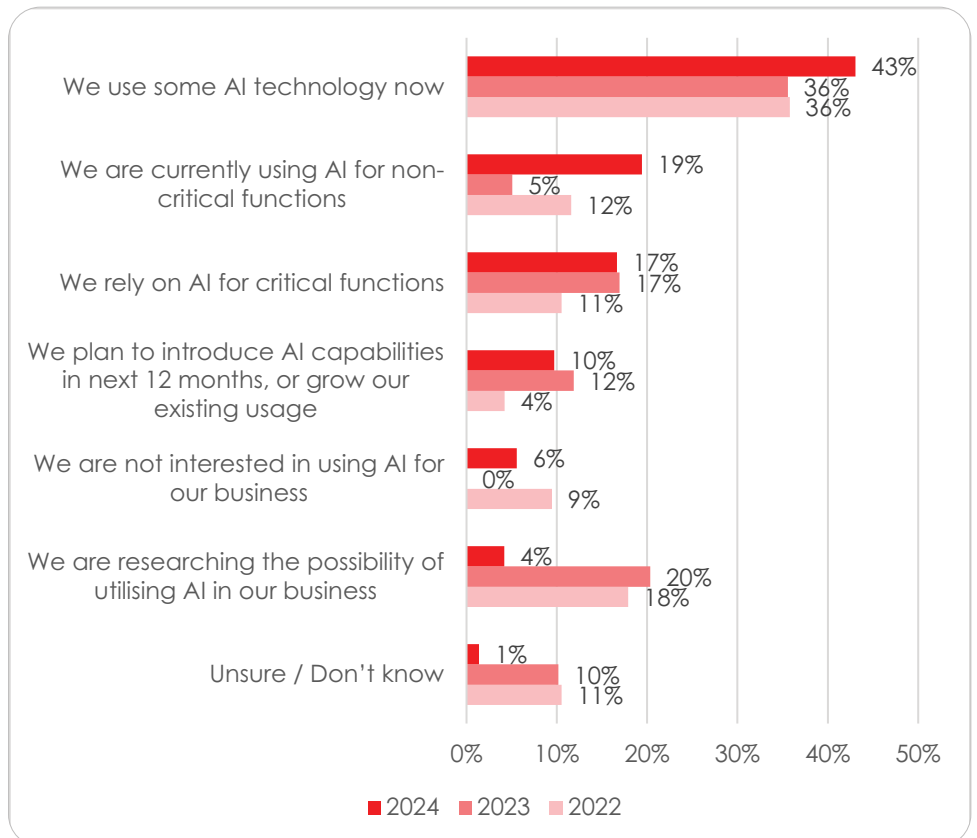| Factor	2024	2023	2022
Increasing operational efficiency	81%	62%	64%
Enhancing the customer experience	63%	58%	59%
Improving cybersecurity	53%	45%	44%
Managing risk and compliance	52%	57%	41%
Improving business processes	47%	36%	46%
Delivering consistent and stable IT performance to the business	31%	34%	36%
Maintaining market relevance and/or Increasing competitive edge	28%	17%	33%
Maximising the value of data holdings	19%	17%	23%
Distributed workforce (e.g. remote access, global locations)	17%	25%	34%
Other (please specify)	5%	4%	6%

What products and/or services will these industry sectors be primarily acquiring from the market?

Cloud-based products and services remain at the forefront of ICT demand, demonstrating their enduring relevance and utility in the tech landscape. Concurrently, there is a rapid growth in the demand for managed services and professional services. This surge reflects a shift towards more comprehensive and integrated solutions, as businesses increasingly seek not only the technological infrastructure but also the expertise to optimise and maintain these systems effectively.

Chart: What products and/or services will these industry sectors be primarily acquiring from the market?

Category	2024	2023	2022
Cloud-based products / services	64%	72%	68%
Professional services	58%	49%	57%
Software	55%	53%	45%
Managed services	50%	32%	40%
Hardware	14%	6%	12%
Other (please specify)	2%	4%	3%

With respect to AI technologies in your business, how do you use/plan to use AI capability?

80% of respondents in technology businesses are adopting AI alongside other technological solutions to enhance efficiency and improve processes. Many are integrating the new AI features that software companies and platform providers have brought to market over the past 12 months. Despite these advancements, businesses do not appear to be leveraging AI for innovation. Instead, the focus remains on optimising current operations and boosting productivity through existing AI capabilities rather than exploring new, innovative applications.


Chart: With respect to AI technologies in your business, how do you use/plan to use AI capability?

Category	2024	2023	2022
We use some AI technology now	43%	36%	36%
We are currently using AI for non-critical functions	19%	5%	12%
We rely on AI for critical functions	17%	17%	11%
We plan to introduce AI capabilities in next 12 months, or grow our existing usage	10%	12%	4%
We are not interested in using AI for our business	6%	0%	9%
We are researching the possibility of utilising AI in our business	4%	20%	18%
Unsure / Don't know	1%	10%	11%

INDUSTRY APPROACH TO NET-ZERO CARBON GOALS

Do you believe that governments should do more to measure the carbon impacts on their own procurements?

Despite Australia's commitment to addressing climate change through enhanced emissions disclosures in financial reports and efforts to reduce emissions, neither the industry nor the Government has effectively measured and collected data. This gap presents an opportunity for the Government to lead by example, setting a benchmark in best practices for emissions data management. Such leadership could serve as a catalyst, encouraging the ICT sector to adopt and implement robust environmental reporting and management practices.
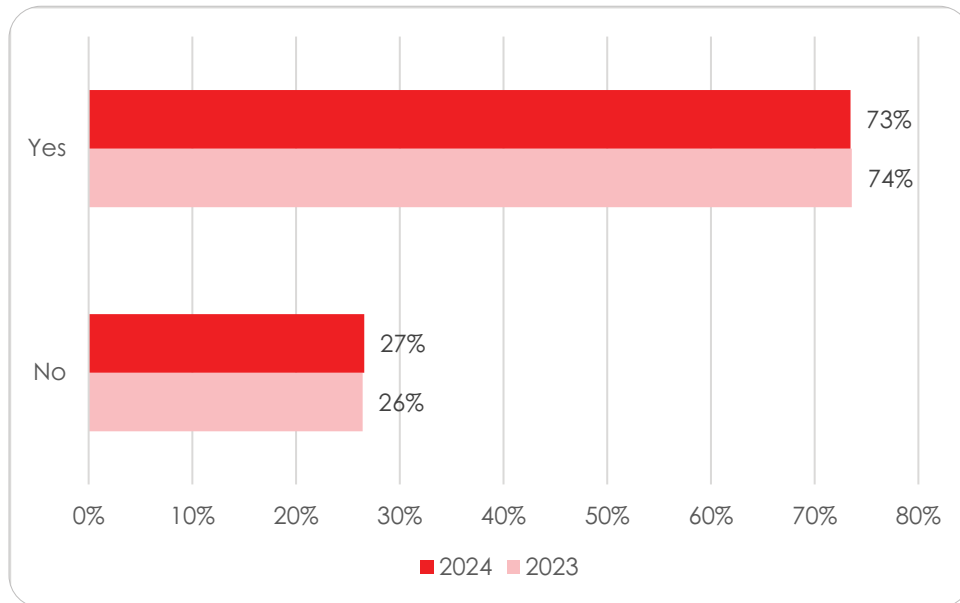
Does your company measure and collect data on its carbon emissions?
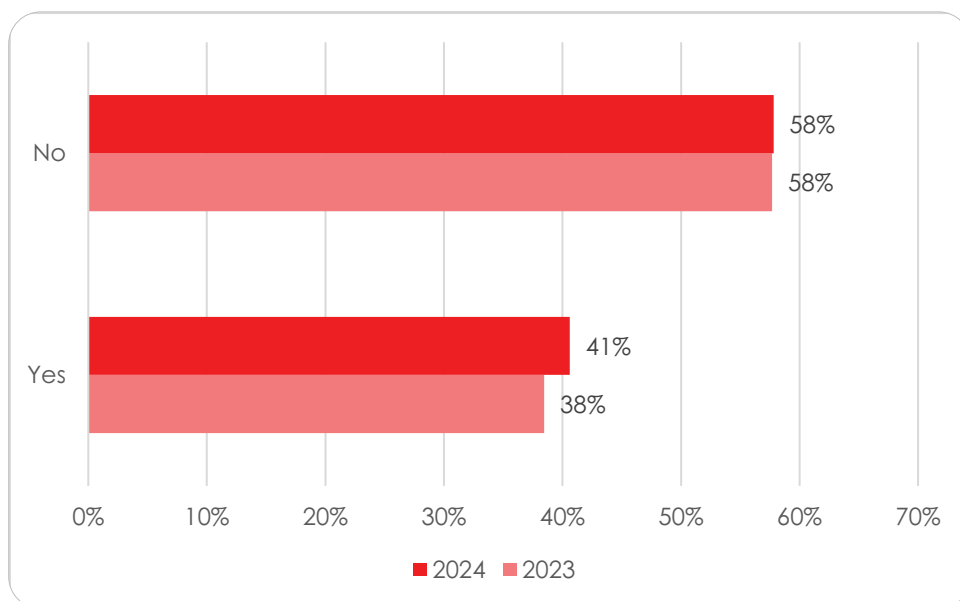
CONCLUSION

The ICT sector has been growing increasingly concerned over the broader national economy outlook and government's understanding of the sector's contribution to the economy. These concerns are at the highest in the last three years of the AIIA conducting the survey. This year's key survey findings are the sector experiencing a reduction in growth from the post-COVID peak, ongoing shortages in skills and industry wanting more from government around greater a vision, investment and leadership and less of a focus on new layers of regulation and uncertainty.

The sector's concerns are made clear in the survey responses, yet central to these is the stark absence of skilled experts, not only within the industry but also within government. This skills shortage critically undermines the ability to innovate and respond adaptively to technological advancements. Additionally, many government procurement processes are slowing down the adoption of new technologies and stifling the growth potential of ICT businesses. This bureaucratic inertia is compounded by an increasingly uncertain regulatory landscape that fails to support the dynamic needs of a fast-evolving digital economy.

The next step is clear: governments must lead by example, ensure the skills requirements of the ICT workforce are being met, streamline its procurement processes, and foster a regulatory environment that is conducive to growth and innovation. Without these changes, Australia risks falling behind in the global technology race, throwing away not only past investments but also future opportunities in the ICT sector.

ABOUT THE AIIA

The Australian Information Industry Association (AIIA) is Australia's peak representative body and advocacy group for organisations in the digital ecosystem. Since 1978 AIIA has pursued activities to stimulate and grow the digital ecosystem, to create a favourable business environment for members and to contribute to Australia's economic prosperity.

We do this by delivering outstanding member value, by providing a strong voice of influence; building a sense of community through events and education; enabling a network for collaboration and inspiration; and developing compelling content and relevant and interesting information.

Our members are diverse and truly represent the diversity of the Australian tech ecosystem and include Australian SMEs and larger technology, telecommunications and infrastructure and cloud companies as well as hyper-scale cloud and multi-national software and SaaS providers.

July 2024

Australian Information Industry Association
For further information please contact the Policy and Advocacy team at the AIIA at
policy@aiia.com.au.

Australian Information
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